10/598,993

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1621con

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JAN 02	STN pricing information for 2008 now available
NEWS 3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 5	JAN 28	MARPAT searching enhanced
NEWS 6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS 7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9	FEB 08	STN Express, Version 8.3, now available
NEWS 10	FEB 20	PCI now available as a replacement to DPCI
NEWS 11	FEB 25	IFIREF reloaded with enhancements
NEWS 12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS 13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS 14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS 15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS 16	MAR 31	CA/CAplus and CASREACT patent number format for U.S. applications updated
NEWS 17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS 18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19	APR 04	STN AnaVist, Version 1, to be discontinued

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:50:13 ON 09 APR 2008

=> FILE REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 16:50:30 ON 09 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 APR 2008 HIGHEST RN 1012980-81-2
DICTIONARY FILE UPDATES: 8 APR 2008 HIGHEST RN 1012980-81-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

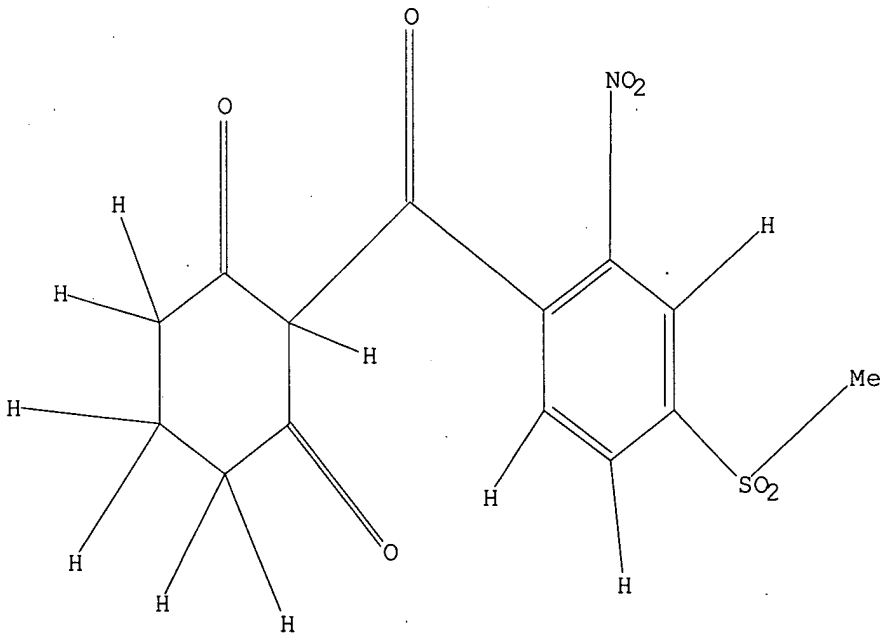
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\APP-0120.str

L1 STRUCTURE UPLOADED

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> S L1 FULL
FULL SEARCH INITIATED 16:52:03 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      512 TO ITERATE

100.0% PROCESSED      512 ITERATIONS                          158 ANSWERS
SEARCH TIME: 00.00.01

L2          158 SEA SSS FUL L1

=> FILE CAPLUS
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             179.74     179.95

FILE 'CAPLUS' ENTERED AT 16:52:37 ON 09 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 9 Apr 2008  VOL 148 ISS 15
FILE LAST UPDATED: 8 Apr 2008  (20080408/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> S L2
L3          301 L2

=> S L3 AND PURIFICATION
         352101 PURIFICATION
L4            3 L3 AND PURIFICATION

=> S L3 AND PURIFY
          16592 PURIFY
L5            0 L3 AND PURIFY

=> S L3 AND CYANIDE
          86894 CYANIDE
L6            8 L3 AND CYANIDE

=> D L4 IBIB ABS HITSTR 1-3

L4   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2007:338928  CAPLUS
DOCUMENT NUMBER:          147:15308
TITLE:                    Photodegradation of sulcotrione in various aquatic
                          environments and toxicity of its photoproducts for
                          some marine micro-organisms
AUTHOR(S):                Chaabane, Hanene; Vulliet, Emmanuelle; Joux, Fabien;
```

Lantoine, Francois; Conan, Pascal; Cooper, Jean-Francois; Coste, Camille-Michel

CORPORATE SOURCE: Laboratoire de Chimie des Biomolecules et de l'Environnement, Centre de Phytopharmacie, Universite de Perpignan, Perpignan, 66860, Fr.

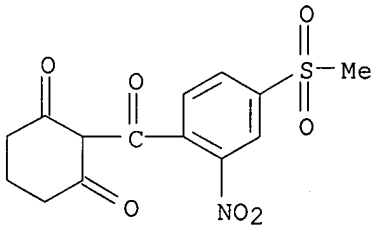
SOURCE: Water Research (2007), 41(8), 1781-1789
CODEN: WATRAG; ISSN: 0043-1354
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Photochem. behavior of sulcotrione, a triketone herbicide, was studied in a variety of aqueous solns. including natural waters (sea and river) under laboratory conditions. Photodegrdn. expts. were carried out under two irradiation systems (UV-B and simulated solar radiation) in order to evaluate kinetics of active ingredient. The degradation kinetics, more rapid under UV-B radiation than solar simulator, followed a first-order reaction (photolysis half-lives 3-50 h) and appeared strongly dependent on water origin, pH and mol. structure of the herbicide. Dissolved organic matter showed a retarding effect while low concns. of nitrates had no effect on photolysis rate. Identification of photoproducts indicated that hydrolysis, a pH-dependent process (no degradation at pH >6 but at pH =3, k =0.0344/h), could be photoassisted. These results were compared to those of mesotrione, another triketone herbicide, which appeared more stable under UV-B irradiation Toxicol. studies on 2 marine heterotrophic bacteria and one cyanobacterium showed absence of effects ≤100 μg/L for both sulcotrione and its photoproducts.

IT 104206-82-8, Mesotrione
RL: POL (Pollutant); OCCU (Occurrence)
(photodegrdn. of sulcotrione in various aquatic environments and toxicity of its photoproducts to marine microorganisms)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:346978 CAPLUS

DOCUMENT NUMBER: 142:392176

TITLE: Process for the preparation and purification of mesotrione using mesotrione enolate formation

INVENTOR(S): Wichert, Julie Marie; Benke, Alan Henry; Guidetti-Grept, Regine Laure

PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.

SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

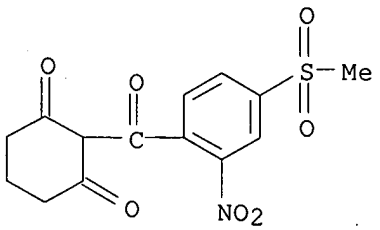
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005035487	A1	20050421	WO 2004-EP10960	20041001
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004279545	A1	20050421	AU 2004-279545	20041001
CA 2537986	A1	20050421	CA 2004-2537986	20041001
EP 1682497	A1	20060726	EP 2004-765733	20041001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1860102	A	20061108	CN 2004-80028185	20041001
BR 2004015019	A	20061128	BR 2004-15019	20041001
JP 2007507457	T	20070329	JP 2006-530065	20041001
MX 2006PA02938	A	20060531	MX 2006-PA2938	20060315
IN 2006CN01113	A	20070817	IN 2006-CN1113	20060331
US 20080045751	A1	20080221	US 2007-573723	20070221
PRIORITY APPLN. INFO.:			GB 2003-23090 A	20031002
			GB 2004-14816 A	20040701
			WO 2004-EP10960 W	20041001

AB A process for reducing the levels of impurities in mesotrione is described comprising: (i) forming a mesotrione enolate (e.g., the potassium enolate) in an aqueous solvent; (ii) carrying out one or more purification processes (e.g., adsorption, distillation, etc.); and (iii) crystallizing the purified mesotrione out of solution

IT 104206-82-8P, Mesotrione
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(process for the preparation and purification of mesotrione using mesotrione enolate formation)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:754346 CAPLUS
DOCUMENT NUMBER: 137:262844
TITLE: Purification of 2-nitro-4-methylsulfonylbenzoic acid

INVENTOR(S): Javdani, Kambiz; Rodriguez, Gilbert; Muxworthy, James Peter
PATENT ASSIGNEE(S): Syngenta Limited, UK
SOURCE: PCT Int. Appl., 12 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076934	A2	20021003	WO 2002-GB1433	20020325
WO 2002076934	A3	20030220		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2434980	A1	20021003	CA 2002-2434980	20020325
AU 2002249384	A1	20021008	AU 2002-249384	20020325
AU 2002249384	B2	20070607		
HU 2003002530	A2	20031128	HU 2003-2530	20020325
HU 2003002530	A3	20051128		
EP 1377544	A2	20040107	EP 2002-718314	20020325
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1500077	A	20040526	CN 2002-807203	20020325
BR 2002007414	A	20040810	BR 2002-7414	20020325
JP 2004525145	T	20040819	JP 2002-576196	20020325
JP 3911237	B2	20070509		
RU 2287521	C2	20061120	RU 2003-131328	20020325
TW 224091	B	20041121	TW 2002-91114621	20020702
IN 2003MN00707	A	20050624	IN 2003-MN707	20030717
ZA 2003006327	A	20040903	ZA 2003-6327	20030814
MX 2003PA08279	A	20031212	MX 2003-PA8279	20030912
US 20040171872	A1	20040902	US 2004-472962	20040409
US 7285678	B2	20071023		

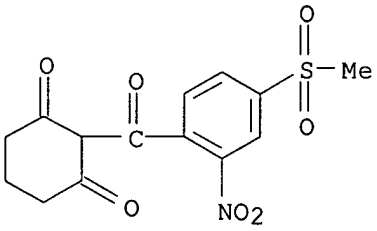
PRIORITY APPLN. INFO.: US 2001-275061P P 20010326
WO 2002-GB1433 W 20020325

AB A method for removing impurities from 2-nitro-4-methylsulfonylbenzoic acid comprises at least two of the following steps, in any order: (a) dissolving 2-nitro-4-methylsulfonylbenzoic acid in water at a pH of 2-10, followed by filtration; (b) contacting an aqueous solution of 2-nitro-4-methylsulfonylbenzoic acid with activated carbon at a pH of 2-10; (c) treating an aqueous solution of 2-nitro-4-methylsulfonylbenzoic acid with sufficient base to hydrolyze undesired nitro and dinitro substituted impurities; followed by maintaining the resulting aqueous solution comprising 2-nitro-4-methylsulfonylbenzoic acid at a temperature of up to about 95°C, and adjusting the pH of the solution to about a pH which is sufficient to effect crystallization of 2-nitro-4-methylsulfonylbenzoic acid upon cooling.

IT 104206-82-8P, Mesotrione
RL: IMF (Industrial manufacture); PREP (Preparation)
(purification of 2-nitro-4-methylsulfonylbenzoic acid for preparation of)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



=> D L6 IBIB ABS HITSTR 1-8

L6 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1145134 CAPLUS
DOCUMENT NUMBER: 147:449489
TITLE: Reverse-phase microcapsules for active ingredients, simplified process of manufacture thereof and formulations
INVENTOR(S): Casana Giner, Victor; Gimeno Sierra, Miguel; Gimeno Sierra, Barbara
PATENT ASSIGNEE(S): GAT Microencapsulation A.-G., Austria
SOURCE: PCT Int. Appl., 57pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007112933	A1	20071011	WO 2007-EP2809	20070329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1840145	A1	20071003	EP 2006-6748	20060330
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
EP 1844653	A1	20071017	EP 2006-24299	20061123
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				

PRIORITY APPLN. INFO.:
EP 2006-6748 A 20060330
EP 2006-24299 A 20061123

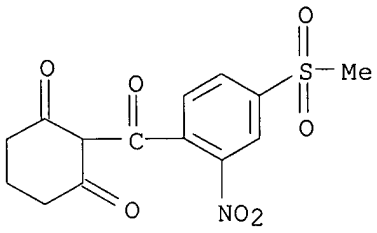
AB This invention relates to microcapsules and processes of microencapsulation of water soluble or water dispersible compds. by reverse-phase microencapsulation, referred to agrochems. but not as a limiting feature, and how to combine them with other oil soluble or oil dispersible compds. in suitable formulations for agriculture, in a industrially viable process that yields tiny microcapsules (<5-10 μm, preferably) and very homogeneous distribution of particle size, and

overall good performance of the formulation. Further, multiple combinations of this reverse-phase microcapsules are disclosed, being specially notorious the combination with normal-phase microcapsules in order to create a Capsule Mixed Suspension (CX) where an outer oil -or alternatively water- phase contains microcapsules of two types: those with a core of water -and actives dissolved or dispersed therein- and those with a core of oil -and actives dissolved or dispersed therein-. Water Dispersible Granules (WDG) and Emulsion Concs. (EC) and suspension concs. (SC) combinations with the reverse phase microcapsules are also successfully performed, providing a novel concept of combinations of oil soluble with water soluble microencapsulated active ingredients.

IT 104206-82-8, Mesotrione
RL: TEM (Technical or engineered material use); USES (Uses)
(microencapsulated; reverse-phase microcapsules for active ingredients, simplified process of manufacture thereof and formulations)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1075767 CAPLUS

DOCUMENT NUMBER: 143:367075

TITLE: A process for purifying mesotrione to reduce residual cyanide content

INVENTOR(S): Benke, Alan Henry; Wichert, Julie Marie

PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.

SOURCE: PCT Int. Appl., 10 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

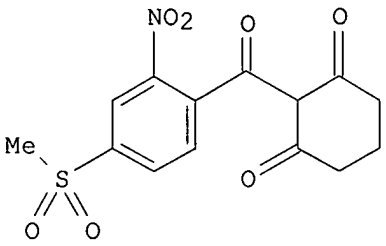
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005092846	A1	20051006	WO 2005-EP2230	20050303
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005225485	A1	20051006	AU 2005-225485	20050303
CA 2558077	A1	20051006	CA 2005-2558077	20050303
EP 1740534	A1	20070110	EP 2005-707695	20050303

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

CN 1938267	A	20070328	CN 2005-80009880		20050303
BR 2005009263	A	20070904	BR 2005-9263		20050303
JP 2007530468	T	20071101	JP 2007-504283		20050303
MX 2006PA10765	A	20061215	MX 2006-PA10765		20060920
KR 2007010010	A	20070119	KR 2006-719799		20060925
IN 2006CN03511	A	20070615	IN 2006-CN3511		20060925
US 20080039661	A1	20080214	US 2007-598993		20070703
PRIORITY APPLN. INFO.:			GB 2004-6894	A	20040326
			WO 2005-EP2230	W	20050303

GI



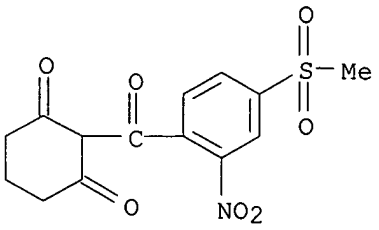
I

AB A process is disclosed for the purification of mesotrione (I). The purification process includes: i. taking an aqueous solution of mesotrione (2-(2-nitro-4-(methanesulfonyl)benzoyl)-1,3-cyclohexanedione) in an aqueous solvent, ii. adjusting the pH of the aqueous solution to a value of 9.5 or higher, and iii. crystallizing the mesotrione out of solution In one example, a paste of mesotrione (10% aqueous solution) was adjusted to pH > 13, acetonitrile charged and the batch crystallized reducing the cyanide content from 546 ppm to 15 ppm. Addnl. sources of mesotrione were derived from a steam distillation of the material and subsequently processed in a similar manner to obtain a crystalline material with a decreased amount of residual cyanide . The current process removes cyanide present from the method of preparation

IT 104206-82-8P, Mesotrione
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(process for purifying mesotrione to reduce residual cyanide content)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:523211 CAPLUS
DOCUMENT NUMBER: 143:39502
TITLE: Herbicidal combinations comprising a HPPD-inhibiting herbicide and an insecticide
INVENTOR(S): Rueegg, Willy Thaddaeus; Urwiler, Michael Joseph; Clemens, Christoplher Glen
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053407	A1	20050616	WO 2004-EP12417	20041103
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2546408	A1	20050616	CA 2004-2546408	20041103
EP 1703792	A1	20060927	EP 2004-797556	20041103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 20080058212	A1	20080306	US 2007-580363	20070129

PRIORITY APPLN. INFO.:
US 2003-526053P P 20031201
US 2004-545302P P 20040217
WO 2004-EP12417 W 20041103

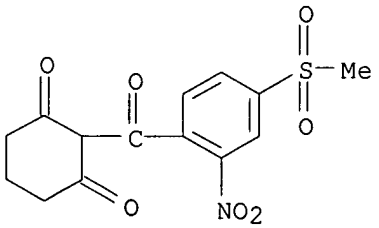
OTHER SOURCE(S): MARPAT 143:39502

AB Aherbicidal combination comprises an HPPD-inhibiting herbicide (certain exceptions), such as isoxazoles, triketones, pyrazoles, benzobicyclon and ketospiradox, preferably mesotrione, and any of a very large number of insecticides.

IT 104206-82-8D, Mesotrione, copper complexes, mixture containing
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(herbicidal combination)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



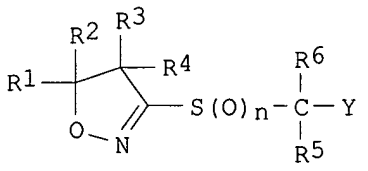
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:142872 CAPLUS
DOCUMENT NUMBER: 140:199329
TITLE: Preparation of isoxazole derivatives and herbicide compositions containing them
INVENTOR(S): Takahashi, Satoru; Ueno, Ryohei; Yamaji, Yoshihiro; Fujinami, Makoto
PATENT ASSIGNEE(S): Kumiai Chemical Industry Co., Ltd., Japan
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014138	A1	20040219	WO 2003-JP10073	20030807
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003254863	A1	20040225	AU 2003-254863	20030807
BR 2003013241	A	20050809	BR 2003-13241	20030807
US 20050256004	A1	20051117	US 2005-521755	20050119
IN 2005KN00058	A	20060106	IN 2005-KN58	20050119
PRIORITY APPLN. INFO.:			JP 2002-230028 A	20020807
			WO 2003-JP10073 W	20030807

OTHER SOURCE(S): MARPAT 140:199329
GI



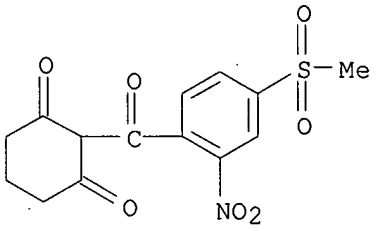
I

AB Disclosed are herbicide compns. characterized by containing as the active ingredients both isoxazoline derivs. represented by the general formula (I) [R, R2 = H, C1-10 alkyl, C3-8 cycloalkyl, C3-8 cycloalkyl-C1-3 alkyl; or CR1R2 together forms a C3-7 spiro ring; R3, R4 = H, C1-10 alkyl, C3-8 cycloalkyl; or CR3R4 together forms a C3-7 spiro ring; or R1 , R2, R3, and R4 together with the carbon atoms to which they are attached form a 5- to 8-membered ring; R5, R6 = H, C1-10 alkyl; Y = an (un)substituted 5- to 6-membered aromatic heterocyclic ring or aromatic heterocyclic fused ring or its N-oxide] and at least one compound selected from group A. The group A compds. are atrazine, simazine, cyanazine, isoxaflutole, mesotrione, flumetsulam, imazethapyr, imazapyr, dicamba, clopyralid, prosulfuron, halosulfuron-Me, rimsulfuron, bentazone, carfentrazone-Et, metribuzin, thifensulfuron-Me, nicosulfuron, primisulfuron, cloransulam-Me, glufosinate, glyphosate, sulfosate, pendimethalin, prometon, diflufenican, linuron, flumioxazin, and metolachlor. Thus, a solution of 6.84 g 5,5-dimethyl-3-ethanesulfonyl-2-isoxazoline in 200 mL DMF was stirred with 5.59 g sodium sulfide hydrate at room temperature for 1 h, treated with 4.94 g

anhydrous K2CO3, 5.51 g Rongalite, and 9.46 g 4-bromomethyl-5-chloro-1-methyl-3-trifluoromethyl-1H-pyrazole, and stirred overnight to give 80.3% 3-(5-chloro-1-methyl-3-trifluoromethyl-1H-pyrazol-4-ylmethylthio)-5,5-dimethyl-2-isoxazole (II). A solution of 8.97 g II in 300 mL CHCl3 was stirred with 16.87 g m-chloroperbenzoic acid at room temperature overnight to give 95.1% 3-(5-chloro-1-methyl-3-trifluoromethyl-1H-pyrazol-4-ylmethylsulfonyl)-5,5-dimethyl-2-isoxazole (III). A combination of III 16 g/ha and cyanazine 500 g/ha controlled 100% Setaria viridis vs. 30-39 and 10-19% for III and cyanazine, resp., when they were used alone.

IT 104206-82-8, Mesotrione
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(synergistic herbicidal composition containing; preparation of isoxazole derivs. as herbicides and synergistic herbicide compns. containing them)

RN 104206-82-8 CAPLUS
CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:203381 CAPLUS
DOCUMENT NUMBER: 138:223306
TITLE: Alkyl polyglycoside surfactant systems for agriculturally active compounds
INVENTOR(S): Hopkinson, Michael J.; Moore, Carolyn E.; Fowler, Jeffrey D.
PATENT ASSIGNEE(S): Syngenta Crop Protection, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030050194	A1	20030313	US 2002-235276	20020905
US 6746988	B2	20040608		
CA 2459698	A1	20030320	CA 2002-2459698	20020905
WO 2003022049	A1	20030320	WO 2002-US28207	20020905

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

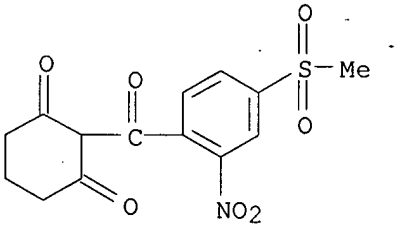
AU 2002323597	A1	20030324	AU 2002-323597		20020905
EP 1423001	A1	20040602	EP 2002-757590		20020905
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK					
BR 2002012549	A	20041013	BR 2002-12549		20020905
HU 2004001655	A2	20041228	HU 2004-1655		20020905
MX 2004PA02176	A	20040629	MX 2004-PA2176		20040305
PRIORITY APPLN. INFO.:			US 2001-317474P	P	20010907
			WO 2002-US28207	W	20020905

AB An agricultural composition comprises at least one agriculturally active compound; at least one alkyl polyglycoside; at least one anionic surfactant selected from a polyaryIphenol polyalkoxyether sulfate and a polyarylphenol polyalkoxyether phosphate; and at least one basic compound; wherein the at least one anionic surfactant is neutralized to the inflection point in the titration curve with the at least one basic compound

IT 104206-82-8, Mesotrione
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(agriculturally active compound; surfactant systems for agriculturally active compds.)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:154410 CAPLUS

DOCUMENT NUMBER: 138:187781

TITLE: Preparation of 3-phenoxy-4-pyridazinol derivatives as herbicides

INVENTOR(S): Tsukamoto, Yoshihisa; Komai, Hiroyuki; Kadotani, Junji; Koi, Kiyoshi; Mio, Shigeru; Takeshiba, Hideo

PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan

SOURCE: PCT Int. Appl., 560 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

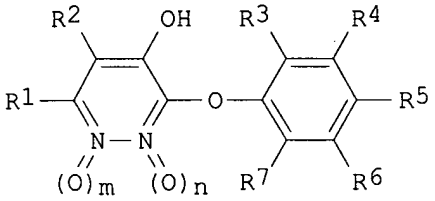
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016286	A1	20030227	WO 2002-JP8278	20020814
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,				

NE, SN, TD, TG

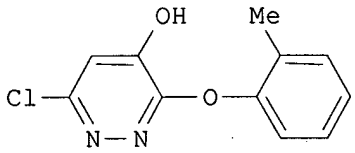
CA 2457575	A1	20030227	CA 2002-2457575		20020814
AU 2002327096	A1	20030303	AU 2002-327096		20020814
AU 2002327096	B2	20071122			
JP 2004002263	A	20040108	JP 2002-236164		20020814
EP 1426365	A1	20040609	EP 2002-760636		20020814
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK					
CN 1543455	A	20041103	CN 2002-816090		20020814
TW 254708	B	20060511	TW 2002-91118561		20020816
ZA 2004001572	A	20050311	ZA 2004-1572		20040226
US 20050037925	A1	20050217	US 2004-487013		20040227
IN 2004KN00324	A	20060331	IN 2004-KN324		20040310
PRIORITY APPLN. INFO.:			JP 2001-248014	A	20010817
			JP 2002-82219	A	20020325
			WO 2002-JP8278	W	20020814

OTHER SOURCE(S): MARPAT 138:187781

GI



I



II

AB The title compds. I [wherein R1 = H, halo, halo(alkyl), cycloalkyl, alkenyl, CN, alkyl-CO, dialkylcarbamoyl, alkoxy, (un)substituted Ph, 5-6 membered heterocyclyl(oxy), or PhO; R2 = H, halo, (alkoxy)alkyl, alkoxy-CO, trialkylsilyl, (un)substituted PhCO, PhO, or PhS; R3-R7 = independently H, halo, alkynyl, bicycloalkyl, CN, CHO, alkyl-CO, CO2H, alkoxy-CO, (dialkyl)carbamoyl, NO2, OH, (halo)alkoxy, alkoxyalkoxy, alkylthio, alkyl-SO, alkyl-SO2, trialkylsilyl, (un)substituted alkyl, alkenyl, cycloalkyl, PhCO, Ph, 3-6 membered heterocyclyl, amino, PhO, 5-6 membered heterocyclyloxy, or PhSO3; or R3-R7 = neighboring two of them form (un)substituted 3-6 membered cyclohydrocarbyl with the carbon atoms attached; m and n = independently 0 or 1] and salts or ester derivs. thereof are prepared For example, 3,6-dichloropyridazine was coupled with 2-methylphenol in the presence of K2CO3 to give 6-chloro-3-(2-methylphenoxy)pyridazine (57%). The pyridazine obtained was treated with POCl3 and Cl2 to produce 4,6-dichloro-3-(2-methylphenoxy)pyridazine (42%). The above compound was hydrolyzed by aqueous NaOH in 1,4-dioxane in the presence of Bu4NCl to afford 6-chloro-3-(2-methylphenoxy)-4-pyridazinol (II) (37%). I showed herbicidal activity, and are useful as herbicides. Formulations containing I as an active ingredient were also described.

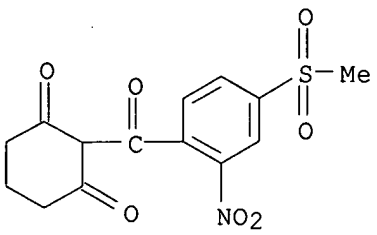
IT 104206-82-8P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(herbicide; preparation of phenoxypyridazinol derivs. as herbicides)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:375518 CAPLUS
DOCUMENT NUMBER: 131:31801
TITLE: Preparation of acylated cyclic 1,3-dicarbonyl compounds by rearrangement of enol esters
INVENTOR(S): Brown, Stephen Martin; Bentley, Thomas William; Jones, Robert Oliver
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9928282	A1	19990610	WO 1998-GB3458	19981117
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2295892	A1	19990610	CA 1998-2295892	19981117
CA 2295892	C	20080205		
AU 9911671	A	19990616	AU 1999-11671	19981117
EP 1034159	A1	20000913	EP 1998-954618	19981117
EP 1034159	B1	20030122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9815026	A	20001003	BR 1998-15026	19981117
HU 2000004664	A2	20010528	HU 2000-4664	19981117
JP 2001524539	T	20011204	JP 2000-523183	19981117
AT 231483	T	20030215	AT 1998-954618	19981117
ES 2187073	T3	20030516	ES 1998-954618	19981117
PT 1034159	T	20030630	PT 1998-954618	19981117
CN 1116266	B	20030730	CN 1998-809707	19981117
TW 528747	B	20030421	TW 1998-87119385	19981123
IN 191500	A1	20031206	IN 1998-DE3548	19981126
IL 134635	A	20050831	IL 1998-134635	19981127
US 6218579	B1	20010417	US 2000-529743	20000418
PRIORITY APPLN. INFO.:			GB 1997-25135 A	19971127
			WO 1998-GB3458 W	19981117

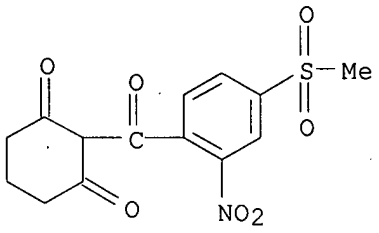
OTHER SOURCE(S): CASREACT 131:31801; MARPAT 131:31801
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; R = (un)substituted Ph, (un)substituted C3-6 cycloalkyl; Q = (un)substituted 5- or 6-membered saturated carbocyclic ring], especially benzoyl- and cycloalkyl-1,3-cyclohexanediones useful as herbicides

and plant growth regulators (no data), were prepared by rearrangement of enol esters (II; Q, R as defined) in a (di)polar aprotic or aromatic hydrocarbon solvent in the presence of a moderate base and an azole instead of a cyanide catalyst. For example, stirring a mixture of 2.31 g 1,3-cyclohexanedione, 1.5 g K2CO3 and 20 mL MeCN for 3 h at 35°, adding 1.5 g PhCOCl and stirring for 30 min, adding 2 g K2CO3 and 0.035 g 1,2,4-triazole and stirring the whole for 16 h at 25° gave 2-benzoyl-1,3-cyclohexanedione in 90% yield.

IT 104206-82-8P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of acylated cyclic 1,3-dicarbonyl compds. by rearrangement of enol esters in presence of potassium carbonate and triazole)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

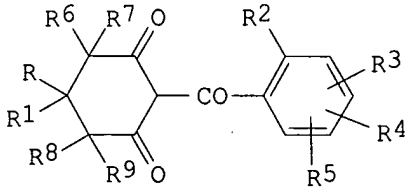
ACCESSION NUMBER: 1989:529017 CAPLUS
DOCUMENT NUMBER: 111:129017
TITLE: Preparation of benzoylcyclohexanedione herbicides
INVENTOR(S): Michaely, William I.; Kraatz, Gary W.
PATENT ASSIGNEE(S): Stauffer Chemical Co., USA
SOURCE: U.S., 49 pp. Cont.-in-part of U.S. Ser. No. 772,593, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4780127	A	19881025	US 1986-880370	19860630
ZA 8302094	A	19840328	ZA 1983-2094	19830324
PL 144046	B1	19880430	PL 1983-241172	19830324
IL 72633	A	19880131	IL 1984-72633	19840809
DD 233150	A5	19860219	DD 1984-267255	19840913
ZA 8407256	A	19860430	ZA 1984-7256	19840914
PL 149280	B1	19900131	PL 1984-249586	19840914
SU 1715189	A3	19920223	SU 1984-3790351	19840914
US 4797150	A	19890110	US 1987-126449	19871130
US 4816066	A	19890328	US 1987-129026	19871204
US 4822906	A	19890418	US 1987-129125	19871204
US 4853028	A	19890801	US 1987-128126	19871204
US 4806146	A	19890221	US 1988-129127	19880208
US 5006158	A	19910409	US 1988-128128	19880223
US 4946981	A	19900807	US 1988-211782	19880627
US 5006162	A	19910409	US 1988-255293	19881011

US 5085688	A	19920204	US 1990-607956		19901101
PRIORITY APPLN. INFO.:			US 1982-361658	A2	19820325
			US 1983-464251	A2	19830209
			US 1983-532869	A2	19830916
			US 1984-587331	A2	19840307
			US 1984-634408	A2	19840731
			IL 1983-68231	A	19830324
			US 1983-532882	A2	19830916
			US 1983-566077	A2	19831227
			US 1984-640791	A2	19840817
			US 1984-683884	A2	19841220
			US 1984-683899	B2	19841220
			US 1984-683900	B2	19841220
			US 1985-752702	A2	19850708
			US 1985-772593	B2	19850905
			US 1985-802134	A2	19851129
			US 1985-802135	B2	19851129
			US 1985-804026	B2	19851203
			US 1986-872067	A2	19860609
			US 1986-880370	A3	19860630
			US 1987-110988	A2	19871021
			US 1987-126449	A3	19871130
			US 1988-128128	A1	19880223

OTHER SOURCE(S): CASREACT 111:129017; MARPAT 111:129017

GI



I

AB The title compds. I (R,R1 = H, alkyl, alkoxycarbonyl, etc.; RR1 = O; R2 = halo, alkoxy, NO2, etc.; R3, R4, R5 = H, halo, alkyl, alkoxy, OCF3, CN, NO2, haloalkyl, etc.; R6-R9 = H, alkyl, etc.) and I salts, are prepared as herbicides. The condensation of 1,3-cyclohexanedione with 2,4-dichlorobenzoyl cyanide in CH2Cl2, in the presence of ZnCl2 and Et3N gave I (R = R1 = H, R2 = Cl, R3 = 4-Cl, R4-R9 = H). This compound, applied pre-emergence at 4.48 kg/ha, totally controlled green foxtail (Setaria viridis), water grass (Echinochloa crus-galli), velvetleaf (Abutilon theophrasti) and other weeds.

IT 104206-82-8P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide)

RN 104206-82-8 CAPLUS

CN 1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]- (CA INDEX NAME)